

Title (en)

CURRENT COLLECTOR STRUCTURE AND METHODS TO IMPROVE THE PERFORMANCE OF A LEAD-ACID BATTERY

Title (de)

STROMKOLLEKTORSTRUKTUR UND VERFAHREN ZUR VERBESSERUNG DER LEISTUNGSFÄHIGKEIT EINES BLEIAKKUS

Title (fr)

STRUCTURE DE COLLECTEUR DE COURANT ET PROCEDES POUR AMELIORER LES PERFORMANCES D'UN ACCUMULATEUR AU PLOMB

Publication

EP 1449269 A4 20071128 (EN)

Application

EP 02778358 A 20020925

Priority

- US 0230607 W 20020925
- US 32539101 P 20010926

Abstract (en)

[origin: WO03028130A1] A battery, a battery electrode structure, and methods to make the same. The product and method comprise applying a layer of lead-tin containing alloy to substrates for anodes or cathodes for lead-acid batteries, in which the substrates are porous or reticulated.

IPC 1-7

H01M 4/80

IPC 8 full level

H01M 4/74 (2006.01); **C25D 3/56** (2006.01); **H01M 4/20** (2006.01); **H01M 4/56** (2006.01); **H01M 4/58** (2006.01); **H01M 4/66** (2006.01); **H01M 4/68** (2006.01); **H01M 4/80** (2006.01)

CPC (source: EP US)

C25D 3/56 (2013.01 - EP US); **H01M 4/20** (2013.01 - EP US); **H01M 4/661** (2013.01 - EP US); **H01M 4/663** (2013.01 - EP US); **H01M 4/685** (2013.01 - EP US); **H01M 4/74** (2013.01 - EP US); **H01M 4/80** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP); **Y10T 29/10** (2015.01 - EP US)

Citation (search report)

- [Y] JP S6127066 A 19860206 - MATSUSHITA ELECTRIC IND CO LTD
- [Y] WO 0015576 A1 20000323 - NAT POWER PLC [GB], et al
- [A] US 4067956 A 19780110 - FRANKLIN CHARLES H, et al
- [A] JP S63244568 A 19881012 - SHIN KOBE ELECTRIC MACHINERY
- [A] M.SCHLESINGER ET AL: "Modern Electroplating", 2000, JOHN WILEY AND SONS INC, NEW YORK, XP002455811
- See references of WO 03028130A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03028130 A1 20030403; CA 2499733 A1 20030403; CN 100355131 C 20071212; CN 1613159 A 20050504; EP 1449269 A1 20040825; EP 1449269 A4 20071128; JP 2005505102 A 20050217; US 2005100791 A1 20050512; US 7060391 B2 20060613

DOCDB simple family (application)

US 0230607 W 20020925; CA 2499733 A 20020925; CN 02823424 A 20020925; EP 02778358 A 20020925; JP 2003531545 A 20020925; US 80979104 A 20040326